REMARKS

Status of the Claims

Claims 1-25 are pending. Claims 1, 12, 19 and 20 are amended. Claims 26-29 are added.

Applicants note that claims 12, 13, and 19 are objected to, and would be allowable if written in independent form including all the limitations of the base claim and any intervening claims. The added claims address this.

No new matter is added in the above amendment. Support for the amendment to claims 1 and 20 can be found throughout the specification (including drawings), specifically including in the specification on pages 11, 12, and 14.

Issues under 35 U.S.C. § 102

Claims 1, 3, 4, 9-11, 20, and 22 stand rejected under 35 U.S.C. § 102 (b) as allegedly being anticipated by Gipson, US Patent No. 5,926,968. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

Gibson discloses a wood drying system to eliminate the discharge of liquid kiln water that includes a kiln, which is heated to dry a batch of wood, a basin to collect the water driven from the wood, and an evaporator in which the collected water is converted into steam.

Gibson fails to disclose or suggest a wood drying system where the condensate (collected liquid) is introduced directly into the interior chamber, i.e., the kiln proper. The Gibson patent discloses the use of a pump to transfer the collected condensate from an in-ground pit to a secondary, elevated storage tank.. The condensate travels to an evaporator, located in a blend chamber that is outside the kiln. See FIG. 1 of Gibson. The blend chamber of Gibson is an

external chamber that receives heated air from the burner system and from which the fans distribute the air into the kiln proper. The temperature of the air inside the blend chamber is considerably warmer than the operating temperature of the air inside the kiln. Kiln temperatures are typically on the range of about 260 degrees (plus or minus), while blend box temperatures often range in excess of 600.[1] By evaporating the condensate inside the high temperature blend box, Gipson introduces additional steam at a much higher temperature into the kiln. Consequently, certain benefits of lumber conditioning are largely lost. For example, as the approximately 700 degree air from the blend box enters the kiln it quickly cools to the temperature ambient inside the kiln. When the warm, moisture laden air is relatively cooled, the lumber nearest the entry point from the blend box will receive an abundance of extra moisture, while that in the far reaches of the kiln will receive little if any.

In contrast to Gipson, the system of the present invention evaporates the condensate inside the kiln chamber. With the claimed system, the condensate is evaporated at a much lower temperature than the blend box. Therefore, the moisture problems discussed above are less prevalent. Additionally, the system of the present invention is more ideally suited for a gentle, more uniform, application of the new steam. The lumber dried with the system of the present invention is universally conditioned with no excessively wet or excessively dry zones.

In order to anticipate a claim, each and every element as set forth in the claim must be described in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, the identical invention must be shown in

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[1] See Gibson at Col. 2, lines 41-42: "The kiln 14 is typically heated to temperatures generally above 200° F."

Col. 3, lines 55-58: "The intense heat (in the range 600-1200° F.) passed into the blend chamber **18**. converts the water in the evaporation basin into steam."

as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Applicants respectfully submit that in view of the deficiencies discussed above, it is clear that the references cited above do not anticipate the present invention.

Thus, Applicants respectfully request that the present rejection be withdrawn.

Claims 1-4 stand rejected under 35 U.S.C. § 102 (b) as allegedly being anticipated by Lewis, US Patent No. 4,250,629. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

Lewis discloses a lumber conditioning kiln that comprises a dehumidification system. This dehumidification system "uses a conventional refrigeration cycle." See Lewis at col. 1, lines 60-61. This system uses a fan to draw the air from the kiln chamber over a cooling coil ("an evaporator of a conventional refrigeration cycle"). See Col. 1, beginning at line 67. This system quickly creates condensate from steam. The condensate is collected in the drain pan, to be stored in an external storage tank (see **58** in Fig. 2). Thus, the Lewis system heats air to dry the lumber, cools the air to produce a condensate, drains the condensate for external storage, and re-heats the dried air returning to the lumber stack.

Lewis fails to disclose or suggest a dry kiln system that comprises an evaporation system that converts condensate into steam inside the chamber interior space, as claimed.

Thus, Applicants respectfully request that the present rejection be withdrawn.

Issues under 35 U.S.C. § 103

Claims 5-8 are rejected under 35 U.S.C. § 103 as allegedly being obvious over Gipson in view of Brunner, US patent number 5,228,209. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

The deficiencies of Gipson, the primary reference, are discussed above. These deficiencies are not remedied by the secondary reference, Brunner. Among other things, Brunner fails to disclose or suggest a dry kiln system that comprises an evaporation system that converts condensate into steam inside the chamber interior space, as claimed. Brunner was cited as providing liquid contact surface and drainage system.

Additionally, claims 5-8 depend from, either directly or indirectly, claim 1. Claim 1 is free from this rejection and allowable as discussed above. Accordingly, the instantly rejected claims, based on their dependency, should be allowable as well.

Claims 14-17, 24, and 25 are rejected under 35 U.S.C. § 103 as allegedly being obvious over Gipson. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested. The of Gipson, the primary reference, are discussed above. Additionally, there is no motivation to modify the kiln of Gipson to arrive at the system of the present invention, which may comprise one or more kilns. The teaching or suggestion to make the asserted modification must be found in the prior art. Applicants respectfully submit that no such suggestion exists in the reference and that in light of the disclosure of the reference, a factually supported, convincing line of reasoning establishing a *prima facie* case of obviousness cannot be established.

Nonetheless, claims 14-17 depend from, either directly or indirectly, claim 1. Claims 24 and 25 depend from, either directly or indirectly, claim 20. Claims 1 and 20 are free from this rejection and allowable as discussed above. Accordingly, the instantly rejected claims, based on their dependency, should be allowable as well.

Thus, Applicants respectfully request that the present rejection be withdrawn.

Claims 18 and 23 are rejected under 35 U.S.C. § 103 as allegedly being obvious over Gipson in view of Koetter et al., US patent number 5,123,177. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

The deficiencies of Gipson, the primary reference, are discussed above. These deficiencies are not remedied by the secondary reference, Koetter et al. Among other things, Koetter et al. fail to disclose or suggest a dry kiln system that comprises an evaporation system that converts condensate into steam inside the chamber interior space, as claimed. Koetter et al. was cited as providing a heated surface to prevent or limit condensation on the kiln floor.

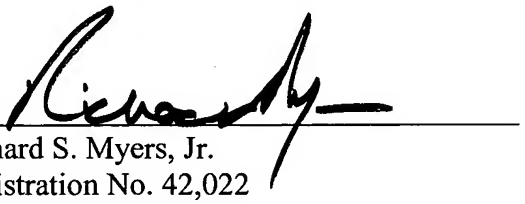
Additionally, claim 18 depends from, either directly or indirectly, claim 1. Claim 22 depends from, either directly or indirectly, claim 20. Claims 1 and 20 are free from this rejection and allowable as discussed above. Accordingly, the instantly rejected claims, based on their dependency, should be allowable as well.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants hereby petition for a two-month extension of time for filing a response to the outstanding Office Action. A Form PTO-2038 in the amount of $225.00 for the extension of time fee is attached.

From the foregoing, further and favorable reconsideration in the form of a Notice of Allowability is requested and such action is believed to be in order.

If the Examiner has any questions concerning this amendment or the application in general, he is requested to contact the undersigned at the number listed below.

Respectfully submitted,



Richard S. Myers, Jr.
Registration No. 42,022
STITES & HARBISON
Customer No. 32885

Attorneys for Applicant
Telephone: (615) 782-2333